IN THE CLAIMS

The text of all claims under examination is submitted, and the status of each is identified. This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (currently amended): A process of separating suspended solids from a fermentation liquor by subjecting the liquor to solids liquid separation stage,
wherein the fermentation liquor is produced in a fermentation process for the production of a fermentation product,
which liquor comprises water, lignin and BOD,
wherein the solids-liquid separation stage is ~~assisted by a treatment system,~~
characterised ~~in that the~~ by a treatment system which comprises either,

(i) a cationic polymer having ~~an~~ a high intrinsic viscosity (IV) of at least 4 dl/g at a dose of above 2 kg/tonne based on dry weight of suspension, or

(ii) a cationic polymer having ~~an~~ high intrinsic viscosity (IV) of at least 4 dl/g and,

(iii) an anionic polymer, and/or

(iv) a cationic polymer of low intrinsic viscosity of below 4 dl/g and a cationic charge density of at least 3 meq/g and/or

(v) inorganic coagulants and/or

(vi) charged microparticulate material.

2. (original): A process according to claim 1 in which the fermentation liquor is subjected to a distillation stage wherein the fermentation product is recovered, wherein the liquor is removed from the distillation stage as a stillage stream and then subjected to the solids-liquid separation stage.

3. (original): A process according to claim 1 in which the fermentation liquor contains the fermentation product wherein the liquor is subjected to the solids-liquid separation stage and then passed to a distillation stage wherein the fermentation product is recovered.

4. (currently amended): A process according to claim 1 in which the treatment system comprises ~~(i) a~~ (iv) the low IV cationic polymer of intrinsic viscosity of below 4 dl/g and a cationic charge density of at least 3 meq/g and ~~(ii) a~~ the high IV cationic polymer (component (i) or (ii)) of intrinsic viscosity of at least 4 dl/g.

5. (currently amended): A process according to claim 1 in which (iv) the low IV polymer is selected from the group consisting of polyamines, amine/epihalohydrin addition polymers, polymers of dicyandiamide with formaldehyde, polymers of diallyldimethyl ammonium chloride (DADMAC), cationic starch and cationic inulin.

6.(previously presented): A process according to claim 1 in which the inorganic coagulant is selected from the group consisting of alum and polyaluminium chloride (PAC).

7. (previously presented): A process according to claim 1 in which the coagulant is a charged microparticulate material.

8. (currently amended): A process according to claim 5 in which the high IV polymer (components (i) or (ii)) is selected from water soluble or water-swellable polymers, which polymer is a natural polymer, semi-natural polymer or a synthetic polymer which has been formed from ethylenically unsaturated water-soluble monomer or monomer blend.

9. (currently amended): A process according to claim 5 in which the high IV polymer (component (i) or (ii)) is either a chitosan based material or a polymer of acrylamide with one or more water soluble cationic monomers selected from dialkylaminoalkyl (meth) acrylates, dialkylaminoalkyl (meth) acrylamides and acid addition salts or quaternary ammonium salts thereof.

10. (currently amended): A process according to claim 5 in which the coagulant is selected from (iv) low IV cationic polymer, inorganic coagulant and charged microparticulate material and - high IV polymer (component (i) or (ii)) are added sequentially.

11. (currently amended): A process according to claim 5 in which the coagulant selected from (iv) low IV cationic polymer, inorganic coagulant and charged microparticulate material and high IV polymer (component (i) or (ii)) are added simultaneously.

12. (currently amended): A process according to claim 11 wherein the coagulant and high IV polymer are a premix comprises ~~(i)~~ (iv) a low IV cationic polymer of intrinsic viscosity of below 4 dl/g and a cationic charge density of at least 3 meq/g and (ii) a high IV (component (i) or (ii)) cationic polymer of intrinsic viscosity of at least 4 dl/g.

13.(previously presented): A process according to claim 1 in which the dose of coagulant is at least 50 grams per tonne (based on dry weight of fermentation liquor).

14. (previously presented): A process according to claim 5 in which the dose of high IV polymer is at least 50 grams per tonne (based on dry weight of fermentation liquor).

15. (previously presented): A process according to claim 1 in which the fermentation liquor is subjected to a mechanical dewatering stage during or subsequent to application of the treatment system.

16. (currently amended): A process according to claim 15 in which the mechanical dewatering ~~step~~ stage is selected from at least one of, a centrifuge, a screw press, a filter press, a belt filter press, a horizontal belt filter or a pressure filter.

17. (previously presented): A process according to claim 1 in which the treated liquor from which suspended solids have been removed are recycled and used as wash water.

18. (previously presented): A process according to claim 1 in which the fermentation liquor comprises lignin and in which the separated solids are dewatered and then subjected to a drying stage to provide a dry solid material and in which the dry solid material is used as a solid fuel.

19. (previously presented): A process according to claim 1 in which the fermentation product is selected from the group consisting of ethanol, glycerol, acetone, n-butanol, butanediol, isopropanol, butyric acid, methane, citric acid, fumaric acid, lactic acid, propionic acid, succinic acid, itaconic acid, acetic acid, acetaldehyde and 3-hydroxypropionic acid, glyconic acid and tartaric acid, and amino acids wherein the amino acids are selected from the group consisting of L-glutaric acid, L-lysine, L-aspartic acid, L-tryptophan, L-arylglycines and salts of any of these acids.